

HOW I DO IT

Retrograde Jejunogastric Tube Decompression After Esophagectomy

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INTRODUCTION

Postoperative gastric distention is undesirable after esophagectomy. Gastric distension mechanically stresses the healing esophagogastric anastomosis, and it exacerbates ischemia in the newly constructed gastric tube [1,2]. In addition, gastric distension predisposes to pulmonary aspiration. For all of these reasons, most esophageal surgeons advocate nasogastric tube decompression after esophagectomy [1,3].

Nasogastric tube intubation is required for approximately 1 week after esophagectomy, and during this time it may produce morbidity of its own. Nasogastric tubes are uncomfortable, and they can act as a conduit for pulmonary microaspiration. Moreover, nasogastric tubes may be detrimental to esophagogastric anastomotic healing. To achieve postoperative gastric decompression, while avoiding the possible adverse effects of nasogastric tube intubation, we have routinely used a retrograde jejuno-gastric tube.

TECHNIQUE

Esophagectomy, gastric pull-up, and esophagogastric anastomosis are performed in the usual fashion. A feeding jejunostomy tube is placed in the proximal jejunum. A second jejunostomy tube is placed approximately 5 cm from the feeding jejunostomy, and is guided retrogradely through the duodenum and into the stomach (Fig. 1). We use a 16 Ch Levin tube (Rusch, Kern, Germany) for this purpose. Jejunostomy site leakage is one possible complication of the retrograde jejuno-gastric tube. After experiencing a minor leak of this type, we have since used a Witzel technique, as described by Pollak [4], to minimize this possibility. The jejunum is carefully sutured to the anterior abdominal wall at the site of the jejunostomy tubes.

Postoperatively, the Levin jejunogastric tube is placed to gravity drainage. We find that gravity drainage with a Levin tube provides better gastric decompression than a

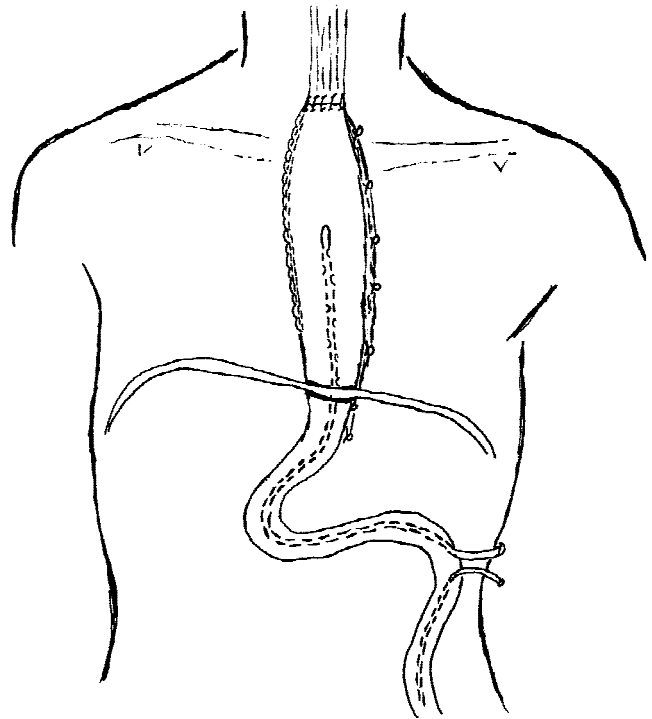


Fig. 1. Dual jejunostomy tubes. A retrograde jejuno-gastric tube is inserted nearby a traditional feeding jejunostomy tube.

sump-type drain connected to suction. It simplifies tube care and facilitates patient ambulation. Small amounts of water are given by mouth. Keeping a patient nil per os, by itself, is not beneficial after esophagectomy; the anastomosis is inevitably exposed to swallowed saliva anyway. The retrograde jejuno-gastric tube provides gastric decompression while allowing the patient to drink small amounts of water.

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Accepted 16 April 1998

We continue gastric decompression until the 10th postoperative day. The jejunogastric tube is removed on that day, after a barium contrast study documents anastomotic healing and satisfactory gastric emptying.

DISCUSSION

We believe that retrograde jejunogastric tube decompression is preferable to nasogastric tube intubation after esophagectomy. Pulmonary complications appear to be minimized, and anastomotic healing proceeds without the presence of an indwelling intraluminal foreign body [5]. Jejunostomy site leakage and small bowel obstruction are possible complications of this technique. Leakage has not been encountered since we began using a careful Witzel technique [4]. Obstruction at the jejunostomy site is not specific to the retrograde jejunogastric tube; it can occur with feeding jejunostomy tube placement alone.

Pulmonary complications and anastomotic leaks are

the leading causes of mortality after esophagectomy [1,6]. Retrograde jejunogastric tube decompression is beneficial for both postoperative pulmonary care and anastomotic healing. It is a simple technique that is worthy of greater use after esophagectomy.

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